TRANSMESENTERIC HERNIA OF THE APPENDIX VERMIFORMIS.[1]

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A MALE, aged twenty-two years, student, was admitted to the University Hospital, January 7, 1904. He had always enjoyed good health, with the exception of two occasions, viz., the first, four years ago, when he had an acute attack of obstinate constipation and generalized abdominal pain, lasting several days and causing him to remain in bed; the second was a similar attack, nine months before admission to the hospital, associated with influenza and lasting ten days.

About two weeks before the present illness the patient was writing almost all day, and he found, while sitting at the table, that he was comfortable only when the right side was "kinked up," as he expressed it. In this position he did not feel any unusual sensation, but as soon as he assumed a normal posture he was conscious of a distress in the abdomen. Without any other premonitory symptoms he became distinctly ill on the afternoon of January 1, about a week, therefore, after the attack just mentioned. He had headache, nausea, vomiting, and moderate pain in the epigastrium. After retiring in the evening he had a pain in the back and felt chilly, but had no distinct rigor. On the following day there were three bowel movements; the pain in the abdomen continued. There was no definite change on the third day; the bowels moved once. On the fourth day the pain was distinctly in the right lower quadrant of the abdomen. It had been continuous with occasional attacks of general abdominal pain. There was no change on the fifth and sixth days. On the seventh day, after saline purges, there were six watery stools.

The notes made on January 8 are as follows: Pulse, 88; respiration, 20; temperature range 100° to $102^{2}/_{5}$° F. The abdomen is not distended, and there is no rigidity. A rounded tender mass is felt in the abdomen, approximately two inches wide and

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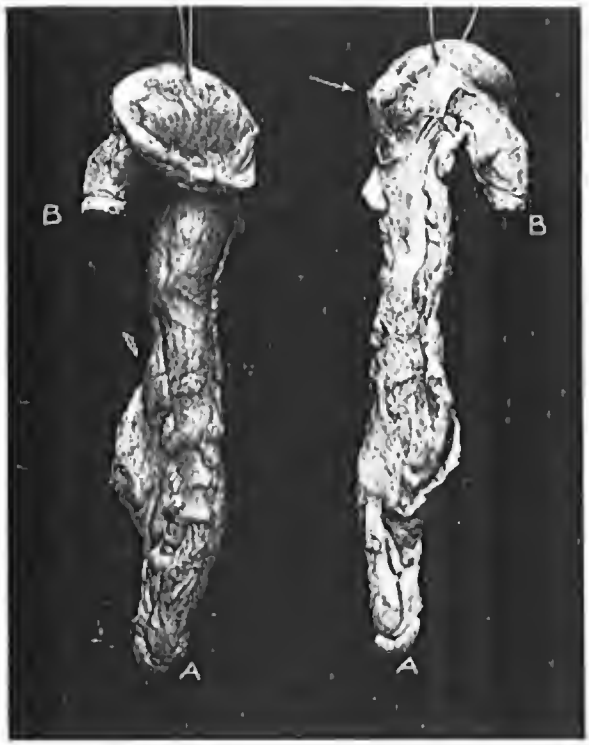

FIG. 1.—Hernia of appendix vermiformis through abnormal opening in mesentery, with strangulation. *A*, The free extremity of the appendix; *B*, the cæcal extremity; the arrow points to the perforation indicated by the small dark spot. The CROWN, composed of lymph, covers the portion that had protruded through the mesenteric opening.

four inches long, in the line of the ascending colon; the lower border of the mass corresponding with McBurney's point. The leucocyte count is as follows: January 8, 2 P.M., 14,640; 9 P.M., 17,920; midnight, 17,000; January 9, 9 A.M., 16,080. The urine is normal.

Although some of the features were unusual, the condition was thought to be appendicitis, with an abscess. An operation was performed, the peritoneal cavity being opened by an incision over the mass. The latter occupied the normal position of the ascending colon and had the general shape and size of this structure. It was firm to the touch and had a very deep red color. At three or four points areas of softening were seen, suggesting the beginning of breaking down in the mass. While no anatomical structure could be recognized through the incision, the mass was thought to be the colon, altered by inflammatory action and lymph formation. As the appendix could not be found, it was supposed to be in the mass described, but a careful search failed to disclose a trace of this structure. The areas of softening were found to be suppurating, epiploic appendages. By enlarging the incision the survey was extended, and finally the cæcum recognized firmly fixed in its position. The longitudinal bands could be seen here, but were obscured above. The anterior band led backward and upward, and seemed to be lost beneath the mesentery. On inspecting the opposite surface of the latter, after displacing a portion of adherent omentum, a small rounded structure was seen projecting from it. The condition at once became clear; the appendix had slipped through a hole in the mesentery and had become strangulated. It was reduced with some difficulty, owing to adhesions and the firm constriction of the ring. As soon as the appendix was liberated the unusual fixation of the cæcum was relieved. The process was removed. The opening in the mesentery, which comfortably admitted the tip of the little finger, was closed by sutures. A Mikulicz drain was inserted and the wound closed. The patient made an uncomplicated recovery.

As will be seen by consulting the illustration, the appendix was strangulated at its base, the organ having doubled upon itself and slipped into the hole in the mesentery. It had ruptured at the point of constriction. The meso-appendix was unusually large and fleshy.

In addition to the rarity of the condition, the case was inter-

esting on account of the presence of an inflammatory mass quite two inches from the affected portion of the appendix, and an apparently healthy area between. This misleading evidence prolonged and complicated the operation. The minute perforation of the appendix permitted very slow leakage, which, owing to the position of the patient, or other causes, collected on the anterior and outer aspect of the colon, and caused an inflammation of the structures with which it came in contact.

I have not been able to find any reference to similar cases, although instances of strangulation of the intestine in the same manner are recorded.